

Older Americans' Patterns of Driving and Using Other Transportation

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People age 65 and older are the fastest growing segment of the U.S. population and the fastest growing group of licensed drivers. From 1985 to 1995, licensed drivers age 70 and older increased by almost 50 percent (National Center for Injury Prevention and Control). Moreover, older urbanites are almost as likely as their rural counterparts to drive a car as their primary mode of transportation.

With Baby Boomers entering the 65-and-older cohort between 2010 and 2030, the number of older drivers should continue to skyrocket. Government agencies, the media, and, to some extent, the general public have sounded an alarm concerning traffic safety once this generation reaches old age, should a majority continue to drive. Unfortunately, public transit and paratransit services (door-to-door transportation designed for older and disabled individuals who are unable to use public transit) are

Most older residents — both urban and rural — drive as their primary mode of transportation. Between 1995 and 2025, the U.S. population age 65 and older is expected to approximately double in size, but the number of the Nation's drivers 65 and older is projected to increase by at least 2.5 times. Higher rates of public transportation use are unlikely unless the availability, quality, and convenience of services, especially in rural communities, are improved. This article examines rural-urban patterns and trends in driving, older people's use of other modes of transportation, and the quality-of-life consequences of driving versus using other transportation.

limited or lacking in many, especially rural, communities. Thus, attention has also turned to the alternative transportation that public, private, and nonprofit agencies provide for older people, as well as to redesign within communities to accommodate the needs and capabilities of an older society.

Although home computers, the Internet, e-commerce, and telephone technologies allow individuals to conduct personal business and communicate from home, most people value face-to-face social interaction and activities outside of their homes (Glasgow and Blakely). In short, without adequate transportation, older people risk social isolation.

This study uses the National Personal Transportation Survey and the Cornell Transportation and Social Integration of Nonmetropolitan Older Persons Study, and focuses on daily rather than long-distance travel. National data are supplemented by New York data to illustrate that national averages do not capture the diversity across

places and regions. Different places have different transportation needs, and a uniform policy on the transportation mobility of older people is unlikely to work in all places. While most older U.S. residents—both rural and urban—continue to drive as the primary mode of transportation, older people in some places use public transportation at higher than average rates.

Population Growth and Change and Older People's Projected Travel Patterns

The older population will double in size between 1995 and 2025, while the number of drivers 65 and older is projected to increase 2.5 times or more (Burkhardt and others). Among those currently over age 65, driving is more common among men than women, but driving is almost universal among both male and female Baby Boomers (Burkhardt and others; Rosenbloom). The large majority of women Baby Boomers will reach old age having driven as their primary mode of transportation

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throughout their adult lives, and they are expected to continue driving during old age. Thus, Burkhardt and colleagues project a faster growth rate in the number of older drivers than in older people.

The 65-and-older population of New York is projected to increase by 35 percent from 1995 to 2025 (New York State Office for the Aging). If New York's older drivers grow at a rate comparable to that projected for the Nation, the growth in New York's older drivers would exceed 50 percent between 1995 and 2025.

Urban-Suburban-Rural Patterns of Mobility of Older Persons

The United States is an automobile-dependent culture; travel is mostly by private vehicle among younger and older residents of both rural and urban areas. However, individuals' preferences, limited availability and poor access to public transportation, as well as envi-



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ronmental and personal constraints vary the modes of transportation and travel patterns of older people.

As a percentage of all trips, all older age groups were more likely in 1995 than in 1983 to use private vehicles, either as drivers or passengers, as their primary mode of transportation (table 1). Older people make approximately 90 percent of their daily trips in private vehicles, with rural older people more

likely than urban to travel by private vehicle. Older people mostly drive themselves; getting rides from members of their informal social network is the second most frequent mode of transportation (Glasgow, 2000).

Public transit use declined from 1983 to 1995 among urban older residents, but it increased slightly among the oldest-old (85 and older) rural residents (table 1). This slight

Table 1

Primary modes of transportation of older rural and urban residents, 1983, 1990, and 1995

Driving among older people is increasing; public transit use and walking are declining

Mode	Ages 65-74			Ages 75-84			Age 85 +		
	1983	1990	1995	1983	1990	1995	1983	1990	1995
<i>Percent</i>									
Urban:									
Private vehicle	83	90	90	79	85	90	75	77	86
Public transit	4	2	3	1	3	3	8	3	2
Taxi	0	1	0	1	1	0	0	3	2
Walking	11	7	6	17	10	7	16	16	9
All others	1	0	1	2	1	1	0	1	2
Rural:									
Private vehicle	88	95	95	85	92	94	80	86	83
Public transit	0	0	0	0	0	1	0	3	2
Taxi	0	0	0	0	1	0	0	3	0
Walking	8	4	4	11	5	5	5	7	15
All others	1	0	1	2	1	1	0	1	0

Source: National Personal Transportation Survey, 1983, 1990, and 1995. Adapted from data analysis provided by John Eberhard, National Highway Traffic Safety Administration.

Table 2

Total trips by selected modes, metro persons age 65 and older by gender, 1990*Central city and suburban older residents are almost equally likely to travel by automobile*

Mode	Central city		Suburbs	
	Men	Women	Men	Women
	<i>Percent</i>			
Private vehicle	88.5	85.1	91.5	89.1
Public transit	3.3	3.3	1.3	1.7
Taxi	.3	.8	.1	.3
Walking	7.0	10.2	6.7	8.0

Sources: 1990 National Personal Transportation Survey. Table adapted from Rosenbloom.

increase—to 2 percent of all trips—may relate to a small increase in the availability of public transit systems in rural areas. Overall, older U.S. residents use public transit for less than 3 percent of all trips (Rosenbloom, 1995). Walking also declined in rural and urban areas between 1983 and 1995, except among oldest-old rural residents.

Environmental barriers to using modes of transportation other than private vehicles are apparent in both rural and urban areas. As retail establishments and services in smaller communities grow fewer, travel distances to reach goods and services in larger communities increase. This may explain the increasing reliance on automobile travel among older rural residents. In urban areas, suburban sprawl increases distances traveled to access community services or to socialize. Moreover, segregated-use zoning, with areas zoned specifically for commercial/office use, retail use, or residential use, has lengthened distances traveled.

Older people's increasing dependence on private vehicles is exacerbated by the inadequacy of

public transit in many, especially rural, communities. Fear of crime may inhibit older people's use of public transit or willingness to walk (Rosenbloom). Distances among activities in suburban and rural communities, especially, have also reduced walking. (It is unclear why walking increased among oldest-old rural residents.)

Older men and women living in central cities versus suburban areas of metro counties are less likely to travel by private vehicle and more likely to use public transit (table 2). These differences, however, are small. When public transit corridors radiate from a city's center and passengers must make transfers, trip distances and duration lengthen (Carp). In general, public transit is unpopular and is perceived by many as primarily for low-income groups (Burkhardt and others).

Some communities do have high-quality, relatively convenient public transit; older people in those communities tend to use it more (Burkhardt and others; Carp). In New York City and other very large American cities with notorious traf-

fic congestion, the prevalence of driving private vehicles may drop off while walking and using public transit and taxis may be higher than the metropolitan average.

The proportion of drivers is considerably lower in metropolitan New York City than in metro and nonmetro areas (with remote rural communities) of upstate New York (table 3). Conversely, one would expect more frequent use of public transit, taxis, and walking among New York City residents than among residents of upstate areas. Drivers calculated as a proportion of individuals of driving age suggest that New York City's Baby Boomers will enter old age exhibiting a lower rate of driving than Baby Boomers residing in upstate metro and nonmetro communities. Variations in the proportion of drivers in different upstate metro and nonmetro areas (table 3) suggest place differences in the availability, quality, and convenience of public transit, but data are not available to address the issue.

Nationally, 77.5 percent of people 65 and older hold drivers' licenses (Burkhardt and others), but only about 60 percent of older New Yorkers do (New York State Department of Motor Vehicles). In New York, a large proportion of the State's older residents live in New York City (40 percent) and its suburbs (25 percent), where driving rates are lower. By contrast, in nonmetro counties of upstate New York, 85 percent of residents 65 and older are drivers (Glasgow, 1998, 2000). Such variations underscore the diversity of places and illustrate how differences among places affect transportation patterns and needs among older people.

Characteristics of Older Drivers

Increased propensity to drive.

The number of older drivers is increasing not only because of the aging of the population but also because rates of obtaining drivers' licenses have increased (Burkhardt and others; Rosenbloom).

Changing preferences, gender roles, and structures of communities all account for the rapid increase in driving among older individuals. Drivers' licensing rates have increased among women and men, but increases have been especially steep among women (Burkhardt and others; Rosenbloom). By age 65, women Baby Boomers will almost universally have been licensed drivers for approximately 30 years, and during old age they are expected to drive in record numbers and in approximately the same proportion as male Baby Boomers.

To what extent is driving problematic for older people? Driving underpins many older individuals' self-image much like starting to

drive is a rite of passage among young people. To older people, driving symbolizes freedom, independence, and competence. However, while most older people drive as their primary mode of transportation, the proportion of drivers declines precipitously after age 85. Thus, oldest-old individuals often reach a point where driving is no longer safe or feasible.

Depending on choice of statistics, older drivers compare favorably or unfavorably to other age groups. Older women and men have low crash rates per 100,000 licensed drivers, especially in comparison to drivers under age 25 (Burkhardt and others). However, older drivers compare unfavorably based on the number of crashes per million miles of driving. (Older people drive fewer miles per year than other age groups.) Crash rates per miles of driving are particularly high among people 75 and older and under the age of 25. Older people's high crash risk per miles is partly due to their driving more on

local streets and roads, where most accidents occur.

Older drivers and drivers under 25 have greater risks of fatality in a car crash than other age groups (Burkhardt and others). With advanced old age (75 and older), the risk of fatality is the highest of any age group. Older people's greater risk of death in a car crash is due to the frailty of their bodies.

Driving patterns tend to be more complex and streets more congested in more urban environments. Therefore, crash risks may be greater among urban than rural older residents, but the severity of accidents, and hence risk of fatality once involved in a crash, may be greater in rural areas where higher speed driving may be more common. However, these are both empirical questions for future research.

Self-regulation of driving.

Diminished visual and hearing acuity, slowed reaction times, and cognitive impairments may accompany old age. Those in failing health and functioning often regulate or cease their driving, but the cognitively impaired may be unaware of the need to stop driving. On average, older people drive more miles annually now than in the past but still average fewer annual miles of driving than other age groups (Burkhardt and others; Rosenbloom). Most older people are retired and report driving less because of less need (Glasgow and Brown). Annual miles of driving taper off as older drivers grow older.

Older drivers frequently regulate their driving by not driving on interstate highways, staying on familiar roads, and driving only during daytime hours, in nonrush-hour traffic, and on less congested streets and roads (Burkhardt and

Table 3

Drivers as a proportion of persons age 16 and over, by place of residence, 1995

Percentage of drivers is lower in New York City than in rural and urban upstate New York

Place	Number of persons age 16 and older	Number of drivers	Percentage of drivers
New York City and suburbs	8,627,165	5,838,614	67.7
Rochester	539,891	491,187	91.0
Syracuse	347,339	313,288	90.2
Poughkeepsie	200,300	180,160	89.9
Ithaca—Tompkins County	77,356	69,934	90.4
Small urban counties ¹	295,467	250,407	84.7
Small rural counties ²	1,375,997	1,257,835	91.4
New York State	13,805,448	10,469,256	75.8

¹Counties with urban places between 10,000 and 50,000 population but none larger.

²Counties with only places of less than 10,000 population.

Source: 1995 National Personal Transportation Survey. Analysis conducted from data provided by Nathan Erlbaum, New York State Department of Transportation.

Table 4

Average daily trips per person, by age and place of residence, 1995
Older New York City residents make fewer daily trips from their homes than older upstate residents

Place	Under 65	65 and older
New York City and suburbs	3.81	3.22
New York City—5 boroughs	3.65	2.95
Manhattan	3.89	2.62
Rochester	4.36	3.56
Syracuse	4.36	3.31
Poughkeepsie	4.03	3.20
Ithaca—Tompkins County	4.46	3.71
Small urban counties	4.14	3.34
Small rural counties	4.09	3.34
New York State	3.96	3.29

Source: 1995 National Personal Transportation Survey. Adapted from data analysis provided by Nathan Erlbaum, New York State Department of Transportation.

others; Glasgow and Brown). Older women are more likely to limit when and where they drive than are older men, and they are more likely to stop driving altogether. Rural older women, however, are more likely than urban older women to continue driving during old age—probably because of the lower availability of public transportation in rural areas. Self-regulation of driving is affected by older individuals' assessments of their driving capabilities, gender roles, and whether they can afford a personal vehicle (Glasgow, 2000).

Consequences of not driving.

The inability or the choice not to drive affects the quality of life of older individuals. Older residents of New York City, with their lower rate of driving, simply do not average as many daily trips from their homes as upstate residents (table 4). In nonmetro counties of upstate New York, participation in work, volunteer, religious, and caregiving roles is higher among drivers than nondrivers, and drivers visit friends and neighbors more frequently than do nondrivers (Glasgow, 2000). The risk of social isolation thus is

objectively greater among older people who never learned to drive or who stopped driving.

No longer driving also hurts older individuals' subjective well-being. Nondrivers are less satisfied than drivers with their modes of transportation, and they are more likely to report being unable to go outside of their homes as often as they would like (Glasgow, 2000). Thus, forcing older individuals to stop driving should not be undertaken unnecessarily.

Ways To Improve Older People's Mobility

Current transportation mobility trends and patterns, as well as projected transportation needs of aging Baby Boomers, suggest the following policy options:

- Re-engineer automobiles to make them more protective of older drivers.
- Re-engineer roadways to improve safety for older drivers (e.g., use road signs with large lettering).

- Re-train older problem drivers, if they can be helped.
- Develop screening tests that accurately identify problem drivers of any age.
- Increase the availability, quality, and convenience of public transit and paratransit services, especially in rural communities.
- Provide educational programs on available public, private, and volunteer transportation and how to use different options successfully.
- Encourage older people to plan for having to stop driving. Involve family and friends because they often become responsible for providing rides.
- Encourage transit-oriented development that is user friendly to older people (e.g., kneeling buses, low-entry buses, and flexible routes).
- Implement mixed-use zoning to develop livable communities and pedestrian-friendly neighborhoods.
- Clearly identify the link between housing, land-use choices, and the transportation needs of an aging society.

For Further Reading

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